

GDT2R75C-T4532 Thru GDT2R800C-T4532

List

List.....	1
Package outline.....	2
Features.....	2
Applications.....	2
Mechanical data.....	2
Electrical specifications.....	2
Electrode arrester.....	3
Suggested solder pad layout.....	3
Packing information.....	4
Suggested thermal profiles for soldering processes.....	5

GDT2R75C-T4532 Thru GDT2R800C-T4532**Gas Discharge Tube Surge 2KA(8/20 μ s)****Features**

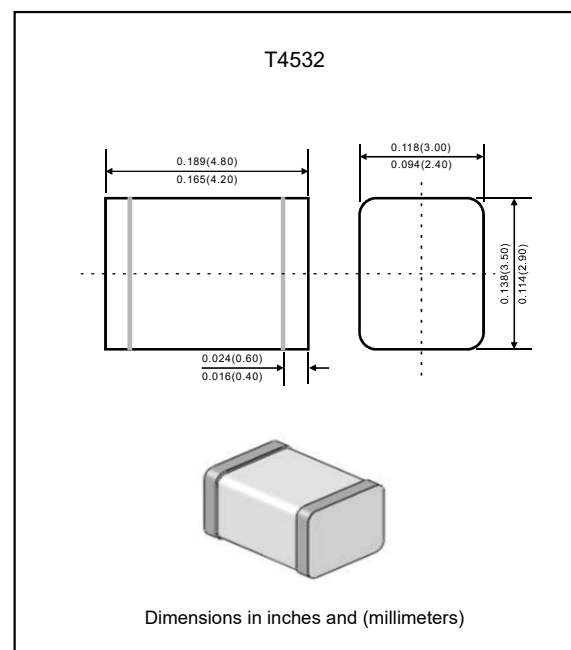
- Extremely small size.
- Extremely fast response time.
- Stable performance over life.
- Very low capacitance.
- High insulation resistance.
- Storage and operating temperature -40 ~ +125°C.
- UL-identification.
- Lead-free parts meet RoHS requirements.
- Suffix "-H" indicates Halogen free parts, ex. GDT2R75C-T4532-H.

Applications

- Splitter.
- PCI Cards .
- Line cards.

Mechanical data

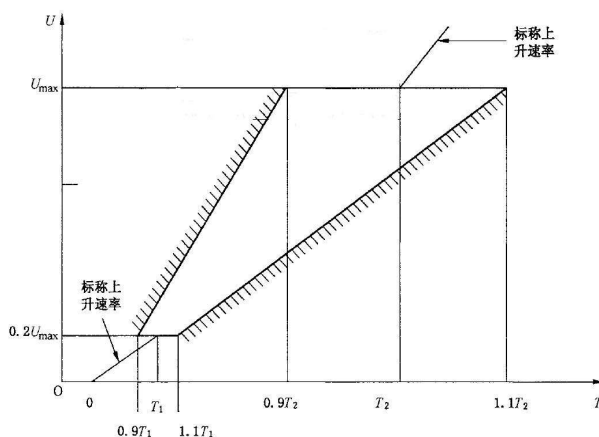
- Meets MSL level 1, per J-STD-020, LF Maximum peak 260°C.
- Case : Molded plastic, T4532
- Terminals : Solder plated, solder able per J-STD-002.
- Polarity : Indicated by cathode band.
- Mounting Position : Any.

Package outline**Electrical specifications**

Parameter	GDT2R75 C-T4532	GDT2R90 C-T4532	GDT2R150 C-T4532	GDT2R230 C-T4532	GDT2R300 C-T4532	GDT2R350 C-T4532	GDT2R400 C-T4532	GDT2R470 C-T4532	GDT2R600 C-T4532	GDT2R800 C-T4532	Unit
Impulse spark-over voltage (100V/s)	±30	±30	±20	±20	±20	±20	±20	±20	±20	±20	%
Impulse breakdown voltage (1KV/ μ s)	600	600	600	800	850	950	1000	1100	1200	1500	V
Discharge current (8/20 μ s, 10 times)	2	2	2	2	2	2	2	2	2	2	KA
AC Discharge current (50Hz, 1s)	2	2	2	2	2	2	2	2	2	2	A
Impulse life (10/1000 μ s, 10A)	100	100	100	100	100	100	100	100	100	100	Times
Minimum insulation resistance	50	50	100	100	100	100	100	100	100	100	DC(V)
	1	1	1	1	1	1	1	1	1	1	G Ω
Max. Capacitance (1MHz)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	pF

GDT2R75C-T4532 Thru GDT2R800C-T4532**Electrode arrester**

DC breakdown voltage



8/20us, Test wave

$$T_1 = 1.25T = 8\mu s \pm 20\%$$

$$T_2 = 20\mu s \pm 20\%$$

10/700us, Test Wave

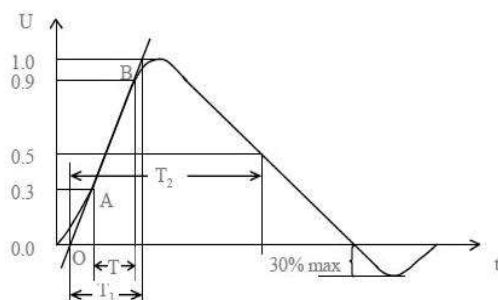
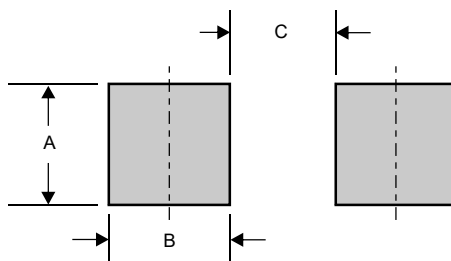
$$T_1 = 1.67T = 10\mu s \pm 20\%$$

$$T_2 = 700\mu s \pm 20\%$$

10/1000us, Test Wave

$$T_1 = 1.67T = 10\mu s \pm 20\%$$

$$T_2 = 1000\mu s \pm 20\%$$

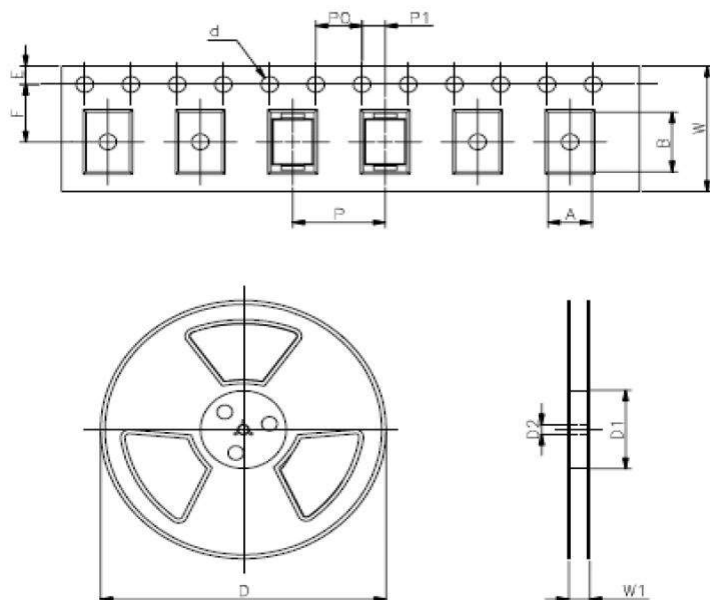
**Suggested solder pad layout**

Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMB-FL	0.142 (3.60)	0.043 (1.05)	0.150 (3.8)

GDT2R75C-T4532 Thru GDT2R800C-T4532**Packaging Information**

2500pcs/reel



REF	mm
A	3.9±0.2
B	4.9±0.2
d	Φ1.5±0.1
E	1.75±0.1
F	5.5±0.2
P	8±0.2
P0	4±0.2
P1	2±0.2
W	12±0.3
D	Φ330±4
D1	Φ50±3
D2	Φ13±0.2
W1	16.8±2

Suggested thermal profiles for soldering processes

-

Profile Feature	Soldering Condition
Average ramp-up rate(T _L to T _P)	<3°C/sec
Preheat -Temperature Min(T _{smin}) -Temperature Max(T _{smax}) -Time(min to max)(t _s)	150°C 200°C 60~120sec
T _{smax} to T _L -Ramp-upRate	<3°C/sec
Time maintained above: -Temperature(T _L) -Time(t _L)	217°C 60~260sec
Peak Temperature(T _P)	255°C-0/+5°C
Time within 5°C of actual Peak Temperature(t _P)	10~30sec
Ramp-down Rate	<6°C/sec
Time 25°C to Peak Temperature	<6minutes